

ABSTRACT OF THE DISCLOSURE

[0045] A novel mobile unit which communicates with a new and advantageous base station. The mobile unit includes a system for generation of position information and a transceiver for transmitting the position information. In the preferred embodiment, the transceiver is a CDMA system and the system for generating position information includes an arrangement for receiving a GPS signal. In the preferred embodiment, a GPS assisted arrangement is employed which is adapted to receive a signal from an airborne platform as well as from a satellite based platform. The inventive base station is adapted to receive position information from a remote unit and provide a received position signal in response thereto. The novel base station is further equipped with a mechanism for directing a beam in response to the received position signal. In the illustrative embodiment, the mechanism for directing the beam is a smart antenna system including an antenna array and a beamforming network for driving the array to output the directed beam.